PROPOSED
TIME CRITICAL REMOVAL ACTION
WORKPLAN
Dayton Canyon Site
West Hills, CA

November 28, 2005

PREPARED FOR:

Centex Homes
27200 Tourney Road Suite 200
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PREPARED BY:

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1.0 INTRODUCTION

1.1 SUMMARY OF CURRENT CONDITIONS

The Centex Homes "Sterling Residential Neighborhood" site is located in West Hills, California, just west of the intersection of Roscoe Blvd. and Valley Circle Blvd as shown in Figure 1. The Sterling site is in an undeveloped area. Centex Homes has entered into a voluntary clean up agreement with the Department of Toxic Substances Control (Glendale Branch) to perform a Preliminary Endangerment Assessment of the proposed future development areas, perform characterization studies of the creek and complete a removal action to address the perchlorate contamination. Due to the likelihood of significant rains occurring during the above PEA and characterization process, Centex Homes is proposing to conduct a Time Critical Removal Action in Dayton Creek, to remove areas of known perchlorate contamination, prior to significant rainfall. Removal of the perchlorate prior to significant rainfall will prevent migration of perchlorate to deeper soils and off the property due to stormwater flow. Centex Homes is submitting this proposal to address the Time Critical Removal of the contaminated sediments from Dayton Canyon Creek.

Centex Homes has previously obtained the following permits related to streambed impacts for the Sterling Development Project:

- Army Corps of Engineers Section 404 Permit (No. 2003-00370-AOA)
- California Department of Fish and Game Streambed Alteration Agreement (No. 5-055-00)
- Regional Water Quality Control Board Section 401 Permit (File No. 00-015)
- Stormwater Pollution Prevention Plan (SWPPP) for Dayton Canyon (Tract No.52866)

Centex Homes has applied for amendments to these permits for the removal actions that are not currently included in the existing permit conditions.

The project applicant, remediation consultant, and biological consultant for the proposed remedial actions are listed below:

Project Applicant
Centex Homes
27200 Tourney Road, Suite 200
Valencia, CA 91355
Contact: John Fitzpatrick

Remediation Consultant
Allwest Remediation
1201 North Barsten Way
Anaheim, CA 92806
Contact: Richard Scott

Biological Monitor
BonTerra Consulting
320 North Halstead Street, Suite 130
Pasadena, CA 91107
Contact: David Hughes

Project Arborist
Pacific Horticulture Consultants
1000 Woodstock Lane
Ventura, CA 93006
Contact: Donald Rodriquez

1.2 OBJECTIVES OF THE PROPOSED EMERGENCY REMOVAL ACTION WORKPLAN

The overall objective of this Proposed Time Critical Removal Workplan is to present the anticipated scope of work, describe procedures to be used to complete the removal of the contaminated soil from the creek, and list steps to restore the creek to its current condition. All resource protection measures in the above-listed environmental permits and permit amendments will be followed during the course of this remediation program. The specific objectives of this Proposed Time Critical Removal Workplan are as follows:

- Identify and remove stream sediments and bank soils contaminated with perchlorate.
- Stockpile contaminated soils and sediments onsite in containers, pending final disposition
- Decontaminate rocks and stream materials for replacement in the creek as part of restoration activities
- Avoid any disturbance to local plants and wildlife to the degree possible during remedial activities.
- Restore the creek to pre-remediation conditions, including restoration of the existing grade of the stream bank and restoring any disturbed vegetation using locally available materials and plants as soon as practical.

This Proposed Time Critical Removal Action Workplan provides the procedures to implement the Time Critical Removal Action:

- Soil Removal Action Scope of Work
- Debris Removal Procedure
- Proposed Removal Action Locations
- Removal Procedures
- Storage Procedures

- Decontamination Procedures
- Documentation requirements
- Restoration Plans
- Analytical and Sampling Methodologies
- Health and Safety Plan

2.0 BACKGROUND

2.1 SITE HISTORY

The Centex Homes "Sterling Residential Neighborhood" site is located in West Hills, California, just west of the intersection of Roscoe Blvd. and Valley Circle Blvd in an area known as Dayton Canyon. The Sterling Residential Neighborhood property is in an undeveloped area. The western boundary of the proposed Sterling Homes site is located approximately 0.5 miles directly east of the approximate eastern boundary of the Rocketdyne facility test site, also known as the Boeing/Santa Susana Field Laboratory facility, which was formerly the Rocketdyne/Santa Susana Field Laboratory facility.

2.2 SUMMARY OF FINDINGS

A preliminary investigation of the site was conducted from May through July, 2005. The results of the Preliminary Investigation indicated perchlorate levels in parts of lower Dayton Creek. A copy of the results was published in the July 26, 2005 Phase 2 Site Investigation Report, which is available in the Client Files at http://www.allwestrem.com/. Based on these observations, Centex Homes has entered into a voluntary clean up agreement with the Department of Toxic Substances Control (Glendale Branch) to perform a Preliminary Endangerment Assessment (PEA) of the proposed future development areas, perform characterization studies of the creek and complete a removal action to address the perchlorate contamination in the creek. The results of the PEA and the characterization studies are currently in process. However, based on the preliminary results shown in Figure 2, the presence of perchlorate contamination in the lower portion of Dayton Creek has been confirmed.

3.0 PROPOSED SCOPE OF WORK-DAYTON CREEK TIME CRITICALREMOVAL ACTION WORKPLAN

3.1 INTRODUCTION

The proposed Time Critical Removal Action Scope of Work is based on the preliminary data developed as part of the PEA and creek characterization.

3.2 TIME CRITICALREMOVAL ACTION LOCATIONS

Based on the data presented in Figure 2, seven areas (RA-1 through RA-8) have been identified for the Time Critical Removal action. These locations are shown in Figure 2. Based on the current data, the creek sediments in these areas will be excavated to a depth of up to 3 feet. In addition, bank soils in these areas will also

be excavated and disposed of offsite. A total of approximately 1000 cubic yards or less is anticipated to be excavated. As indicated in Figure 2, an area adjacent to the creek will be used for staging and loading of soils. The area selected for loading and staging is a disturbed area, and project activities will not adversely affect any native vegetation or wildlife resources.

3.3 SOIL REMOVAL PROCEDURES

Based on our current understanding of the perchlorate data in the creek area, it appears that the perchlorate contamination is very shallow. Therefore, the proposed Time Critical Removal actions will focus on the removal of the shallow creek sediments and surficial bank soils.

3.3.1 OPERATING PROCEDURES

Due to the ephemeral nature of the creek, all activities will be scheduled during periods of dry weather. Currently the creek is dry and is not anticipated to be flowing until substantial rain is received. To avoid working in wet conditions, no work will occur within 72 hours of a precipitation event in excess of 0.25 inches as forecast by the National Weather Service.

The remediation consultant will provide a trained monitor (hereafter referred to as the "Remediation Monitor") to supervise all decontamination activities, document all remediation work, and ensure that all operating procedures are properly followed.

The Biological Monitor will be responsible for documenting impacts to biological resources and ensuring compliance with regulatory permits.

The Project Arborist will be responsible for recommending procedures to minimize stress to oak trees and documenting the impacts to oak trees in a post-project report.

3.3.2 WATER DIVERSION

Due to the large area which drains through the Dayton Canyon Creek, it is not practical to try to block or divert the stream around the removal areas during times of significant rainfall. Therefore, a temporary dam will be installed above the removal zone to control any unanticipated flows in the streambed. A series of hay bales will be installed both upstream and downstream from the excavation area, to prevent silt migration, so as to comply with all resource agency permits. The temporary dam will be installed prior to the days work and removed at the end of each days work. The temporary dam may be constructed using sandbags or may be a commercially available Aquadam. Due to the potential for rainfall, all removal activities will be designed to be completed within one working shift. Each working day, an area of the creek, approximately 50 to 75 feet in length will be remediated. The actual size of the areas will be determined by the complexity of the removal. By working on a small area, the soils can be excavated, and replaced in one day, minimizing the risk of unexpected rainfall. This will reduce the risk of areas being left exposed during unanticipated storms.

The proposed plan is based on minimal flow in the creek, prior to substantial rainfall. If incidental flows from neighboring properties result in ponding behind

the temporary dam, then water will be pumped downstream of the work area once water has reached a depth of six to twelve inches. The ponded water will be pumped from a clean catch basin installed just above the dam. The water will be pumped through a 5 um sediment filter, into a 500 tank at up to 50 GPM. The tank will be equipped with a 1.5 inch hose, and the water allowed to gravity flow to below the working area. Two silt fences will be installed just below the discharge point to prevent silt migration. Water from dewatering operations will not be discharged to the creek without treatment to remove silt, as described above.

On completion of the creek and bank restoration activities, the upstream and downstream dams will be removed. The water behind the upstream dam will be allowed to flow through the restoration area, through a series of silt fences installed across the creek. Once the flow is clear of sediments, the silt fencing will be removed.

3.3.3 REMOVAL METHODS

It is anticipated that the majority of the removal action will be completed by hand excavation, or using small construction equipment (e.g. Bobcat excavator). Due to the surficial nature of the contamination, it is anticipated that only the upper one to three feet of sediments will be removed. The excavated sediments and soils will be temporarily in stored in large bins onsite, away from the creek zone, as shown in Figure 2. These materials will then be profiled and stored onsite for future disposition and eventually shipped offsite for disposal on completion of the PEA process. To control any dust generated during the excavation, stockpiling or transportation of the impacted soils, the soils will be kept sufficiently wet. The local haul road will also be maintained to prevent generation of dust.

Sediments which have been removed will be replaced using local onsite materials of a similar texture. The sediments will be compacted, and covered with decontaminated rock. Since the majority of the perchlorate contamination has been found in the sediments, only surface removal of bank soils is anticipated. The bank soils will be removed using hand equipment to minimize disturbance of the local plant life and tree roots.

3.3.4 OAK TREE PROTECTION

All work that is performed within the critical root zone of oak trees on site will be monitored by a certified arborist (Project Arborist). The Project Arborist shall identify all trees that are within the project work area and qualitatively judge their health. Once remediation work has begun, the Project Arborist will advise work crews on ways to minimize impacts to oaks and will keep notes on which trees were impacted as well as the number and size of roots that were damaged. Soil backfilling operations will also be monitored by the project arborist to ensure that the proper type of soil is replaced and that this work is done so as to minimize tree stress. As part of the post-project report, the Project Arborist will provide a list of trees that had work performed within their root zone. Included in this list will be the size of the tree, the tag number, the number of roots that were damaged, the approximate percentage of root zone that was impacted, and the number of roots greater than one inch in diameter that were damaged. All trees that are determined to have been critically damaged during remediation activities will be mitigated at a 5:1 ratio (for trees with a diameter at breast height (DBH) of

less than 24 inches) or 10:1 (DBH greater than 24 inches) within one year of remediation completion.

3.3.5 ROCK DECONTAMINATION

The creek contains substantial amounts of rocks. The rocks will be removed from the impacted areas of the creek, and transported to a decontamination area, away from the creek zone, as shown in Figure 2. The rocks will be placed in a lined and bermed area and decontaminated using steam cleaning. The rinsate from the steam cleaning will be collected, analyzed and transported offsite for disposal. The decontaminated rocks will be returned to the creek. All decontamination activities will be supervised by the Remediation Monitor who is experienced in handling hazardous materials to ensure satisfactory results.

3.3.6 STORMWATER MONITORING

During rainfall, stormwater samples will be collected upstream and downstream from any removal activities. These samples will be analyzed for perchlorate to confirm that site contaminants are not transferred to the stormwater system.

3.3.7 EROSION CONTROL

No work shall be conducted in the stream channel within 72 hours of any predicted precipitation in excess of 0.25 inches. As previously indicated, the proposed activities will only expose a small portion of the creek soils at any one time, to minimize the potential for unanticipated flows. However, If a rain event is predicted after cleanup activities have been initiated, all exposed soils within the work area will be protected to avoid soil discharge into Dayton Creek. Exposed areas will be covered with 10 mil plastic and secured with clean rocks to reduce erosion. Erosion control along the banks of Dayton Creek will consist of installing appropriate erosion control fabric such as jute mesh that is anchored to the soil to prevent winter storm flows from damaging or dislodging the fabric. Exposed soil outside the stream corridor that has the potential to erode into Dayton Creek will be protected with erosion control fencing, straw waddles, and sand bags, as deemed necessary by the Biological Monitor and Remediation Consultant. All erosion control measures shall remain in place until restored vegetation has become sufficiently established to prevent soil erosion.

3.3.8 OPERATING PROCEDURES

The following operating procedures will be observed at the site during removal activities.

<u>Vehicles and Construction Equipment</u>

- No vehicles are permitted in the creek with the exception of the excavator.
- All vehicles and construction equipment will be staged outside the creek zone.
- No vehicle maintenance activities will be allowed in the creek zone
- Equipment will be checked regularly to prevent leaks or spills
- Spills will be cleaned up immediately

- All exposed areas that can potentially drain into the streambed will be covered with erosion control fabric to prevent sediment discharge

Vegetation/Wildlife

- The Biological Monitor will be present during all remediation activities to minimize impacts of vegetation and wildlife and ensure compliance with regulatory permits.
- The Remediation Monitor and the Biological Monitor will identify the minimum number of entrance points to the creek to avoid impacting vegetation along the banks of the stream.
- The Biological Monitor will inspect the work area immediately prior to remediation activities for any wildlife species. All animals observed will be relocated to adjacent habitat.
- Vehicle traffic will be minimized under the dripline of oaks, as directed by the Biological Monitor.
- No soil will be stockpiled and no vehicles will be stored under the dripline of any trees.
- All remediation actions will take place outside of the breeding bird season (March 1 to September 1).
- The Biological Monitor will provide documentation to the California Department of Fish and Game (CDFG) and U.S. Army Corps of Engineers (USACE) confirming that all work was performed in accordance with this work plan.
- The Biological Monitor will continue to monitor the health of all trees within and adjacent to the work area for a period of one year to determine if any trees were killed as a result of the stream remediation activities.

Construction Materials/Wastes

- All soils, rocks or sediments will be stockpiled at least 150 feet from the creek and outside of the drip area of all trees.
- No materials will be stockpiled on the site that is hazardous to aquatic life.
- All debris, trash or rubbish will be stored properly, away from the creek, and removed from the site on a regular basis in accordance with the project Stormwater Pollution Prevention Plan.
- The Remediation Monitor and the Biological Monitor will identify an appropriate location at least 150 feet from the creek area to stockpile spoil that will not impact any native vegetation.

3.4 SOIL REPLACEMENT PROCEDURE

The replacement soils will be obtained from an area adjacent to the creek, which will be excavated as part of final grading operations. The area will be tested for perchlorate, and evaluated by the biological monitor to assure the material is of comparable texture to the streambed soil, free of weeds, and acceptable for use in the creek. The replacement soils will be transported to the creek using an excavator or backhoe. Prior to soil removal activities, the Biological Monitor shall survey the creek and create a stream profile in at least five locations within the work area. Soil

replacement activities will attempt to re-create the pre-existing stream profile to the extent possible.

3.5 DEBRIS REMOVAL

As a result of the recent brush fire, a significant amount of debris has been exposed. The debris consists of car frames, concrete, bricks, home appliances, and other materials. As part of the removal activities, the bulk of the debris will be documented, collected, stockpiled, and transported offsite for disposal or recycling. The debris will be collected using a small skip loader or by hand, and stored on a portion of the southern parcel, pending offsite management. No grading or disturbances of trees or endangered plants is anticipated during the debris removal. All debris that is encountered within Dayton Creek will also be removed during the course of remediation activities.

4.0 STORAGE AND TRANSPORTATION PROCEDURES

All soils, sediments and rock removed from the creek will be transported to the temporary storage area shown in Figure 2. The excavated soils will be stored in containers onsite, pending final disposal. The stockpile areas will be located at least 150 feet from the creek.

5.0 DECONTAMINATION PROCEDURES

Construction equipment will be decontaminated between the excavation of the impacted soils, and the replacement with clean materials. The equipment decontamination will consist of removing soil from the excavation bucket, tires, and removing any soils left on the equipment surfaces, by pressure washing or by broom removal. The residuals will be collected, stockpiled and disposed of with the soils and sediments.

Decontamination of shovels, tools and other equipment will be performed using a pressure washer. The residuals will be collected, and managed with the impacted soils and sediments.

Quality control of all decontamination procedures will be provided by the Remediation Monitor.

6.0 DOCUMENTATION REQUIREMENTS

The Remediation Monitor will take color photographs and/or videos of representative sampling locations and the surrounding site to show the area., Image files name will be logged on the appropriate field documentation form to identify photographs with the correct sampling location. Removal locations will be documented using GPS coordinates. Any materials shipped from the site will be properly manifested for disposal. This will include the use of trip tickets and weigh records. All samples for analytical analysis will be properly labeled, and collected under chain of custody protocol. The remediation consultant will be responsible for providing end of project documentation to the Department of Toxic Substances Control, the Regional Water Quality Control Board, the City of Los Angeles, and the County of Los Angeles.

The Biological Monitor will provide documentation to CDFG and USACE that discusses all remediation activities onsite to ensure that all measures described in

this workplan are adequately implemented. Photographic documentation will also be provided. The Biological Monitor will also describe all impacts to vegetation in CDFG and USACE jurisdictional areas and any necessary restoration activities that will be needed. Included in this documentation will be a report from the Project Arborist that describes impacts to all oak trees, as described in Section 3.3.4.

7.0 RESTORATION PLANS

After removal of the impacted sediments and soils, streambed soils will be replaced by backfilling onsite soils of a similar texture to approximately the pre-excavation elevation. The soils will be lightly compacted using a portable compactor (Wacker). A layer of decontaminated rock will then be placed over the soil, to the approximate pre-excavation elevation. Soils excavated from the bank slopes will be replaced in such a manner so as to protect oak tree health, as directed by the Project Arborist. Surface soils excavated adjacent to the creek will be replaced and lightly compacted to approximately the same elevation.

The restoration of herbaceous vegetation within the streambed will be accomplished using passive methods. It is anticipated that native herbs and grasses from upstream areas will readily become established. The Biological Monitor will continue to monitor the work area for a period of two years to identify any non-native species present and direct the Maintenance Contractor to remove all such species.

All disturbed upland areas within CDFG jurisdiction will be planted with native vegetation as listed in Table 1. Native restoration of these areas will take place as early as irrigation can be provided to these areas (anticipated to be Fall 2006). Maintenance and monitoring of any restoration areas associated with this remediation project will be incorporated into the mitigation program for the project as a whole, to be approved by the California Department of Fish and Game.

No native trees within or adjacent to the work area are expected to be disturbed during the remediation activities. Should any native trees be judged as critically damaged by the Project Arborist at the conclusion of remediation activities, they will be mitigated at 5:1 ratio (for trees with DBH less than 24 inches) or at a 10:1 ratio (for trees with DBH greater than 24 inches). All other trees that had work occur within their root zone (to be listed in the Project Arborist's post-project report) will be monitored for a period of seven years to determine if their health was compromised. Any of these trees that exhibit deteriorating health within the seven year monitoring period will be mitigated at a 10:1 ratio.

TABLE 1
CONTAINER SPECIES FOR RESTORATION OF DISTURBED AREAS

Scientific Name	Common Name	Size	Plants/Acre
Lonicera subspicata	southern honeysuckle	1 gallon	200
Rhus ovata	sugarbush	1 gallon	100
Salix goodingii	black willow	onsite cutting	200
Salix lasiolepis	arroyo willow	onsite cutting	200
Sambucus mexicana	Mexican elderberry	1 gallon	100
Solanum xanti	chapparal nightshade	1 gallon	200
Symphoricarpos mollis	creeping snowberry	1 gallon	200

8.0 ANALYTICAL AND SAMPLING METHODOLOGY

8.1 ANALYTICAL PARAMETERS

The soils and sediments remaining after the removal activities will be sampled and analyzed for perchlorate using USEPA Methods 314.0. One sample will be collected for approximately every 750 square feet of soil removed from the creek. The removal areas will be staked out for sampling, and photographed. Confirmations samples will be collected prior to backfilling. DTSC will be present onsite during confirmation sampling. Samples will also be collected from the stockpiled soils and sediments for profiling purposes to facilitate disposal.

Stormwater samples will be collected during each significant rainfall event that occurs during the removal action. The stormwater samples will be collected as grab samples from the creek during low flow conditions (i.e., prior to heavy rainfall). The samples collected will be analyzed for perchlorate using USEPA Method 314.0.

8.2 SAMPLING METHODS

8.2.1 SEDIMENTS AND SOILS

Soil and sediment samples will be collected using a hand trowel, and placed in jars.

All sampling locations will be staked and photographed. The sampling locations will be documented using a hand held Global Positioning Satellite receiver, and the coordinates recorded.

8.2.2 SURFACE WATER SAMPLES

If surface water samples are to be obtained, they will be collected as follows. For creek samples, a clean 100 ml beaker will be used to collect the water from the stream. The water will then be transferred to 40 ml VOA vials (unpreserved) and capped. Three VOA vials will be collected for each surface water sample. The samples will be labeled and placed in a cooler chilled to 0 - 4 degrees C.

8.3 SAMPLING QUALITY ASSURANCE PROJECT PLAN

For purposes of evaluating the removal action, the Sampling Quality Assurance Plan presented in the August 24 Preliminary Endangerment Assessment Workplan will be used. This document provides the necessary procedures for the sampling, analysis, shipping, chain of custody, and documentation of the post removal soil and stormwater sampling.

9.0 HEALTH AND SAFETY PLAN

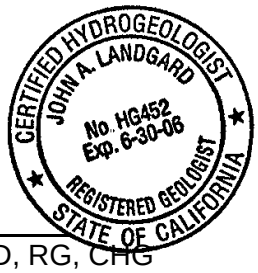
All activities at the site will be conducted in accordance with the Site Health and Safety Plan.

10.0 STATEMENT OF LIMITATIONS

Information provided in this report by Allwest Remediation, Inc., Project Number 05-8520 EI 01 is intended exclusively for the use of Centex in the assessment of potential environmental liability for the subject property. The findings and conclusions discussed in this report are based on field and laboratory data collected during the course of this investigation and our current understanding and interpretation of environmental regulatory agency regulations, guidelines and policies. The professional services have been performed in accordance with practices generally accepted by other construction engineers, geologists, hydrogeologists, environmental engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made. There is no guarantee that the work conducted will identify any and all sources or locations of contamination.

Respectfully submitted,

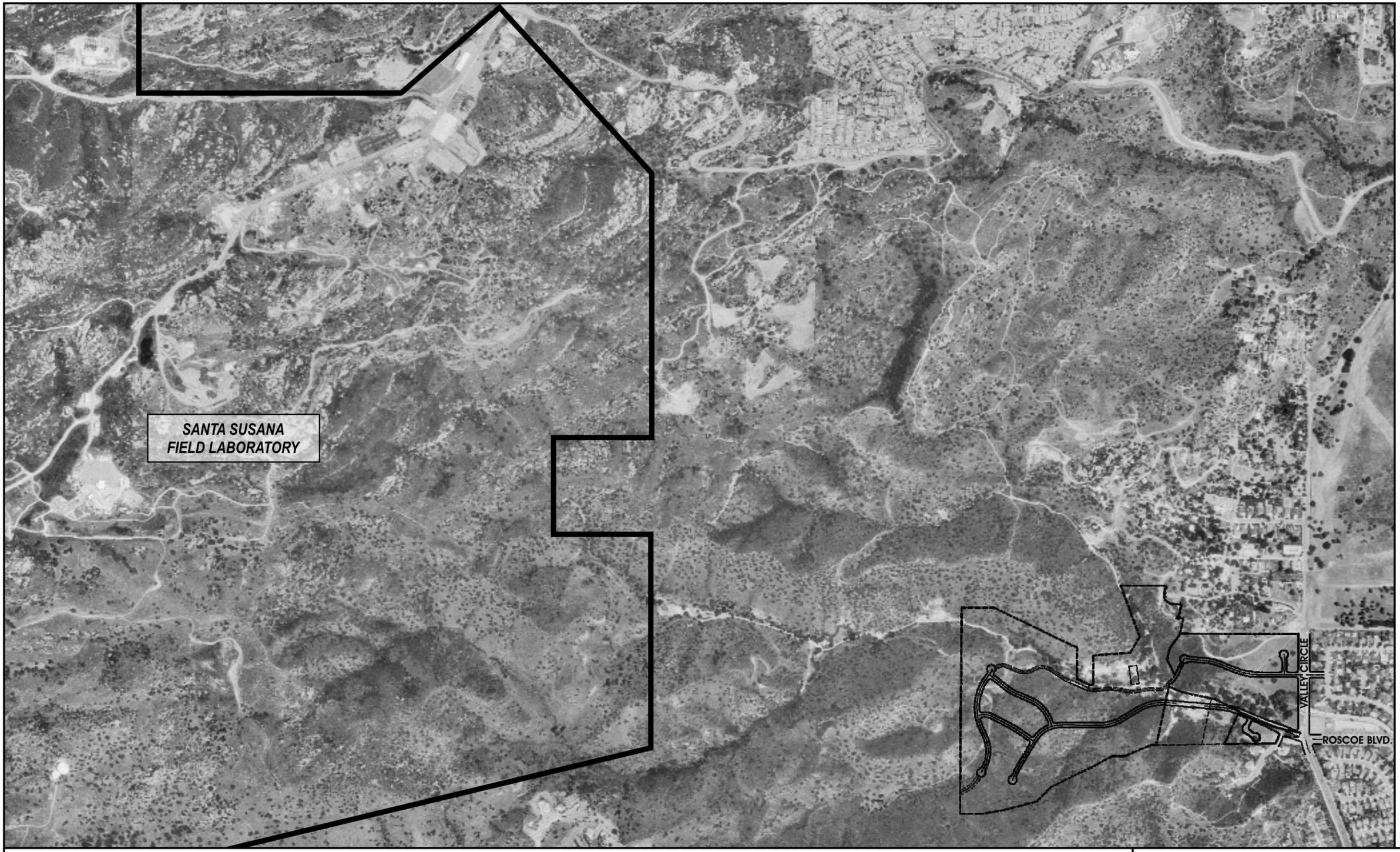
ALLWEST REMEDIATION, INC.



RICHARD SCOTT
Operations Manager

JOHN LANDGARD, RG, CHG
President

FIGURES



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LEGEND

PROJECT LAYOUT

SANTA SUSANA FIELD LABORATORY

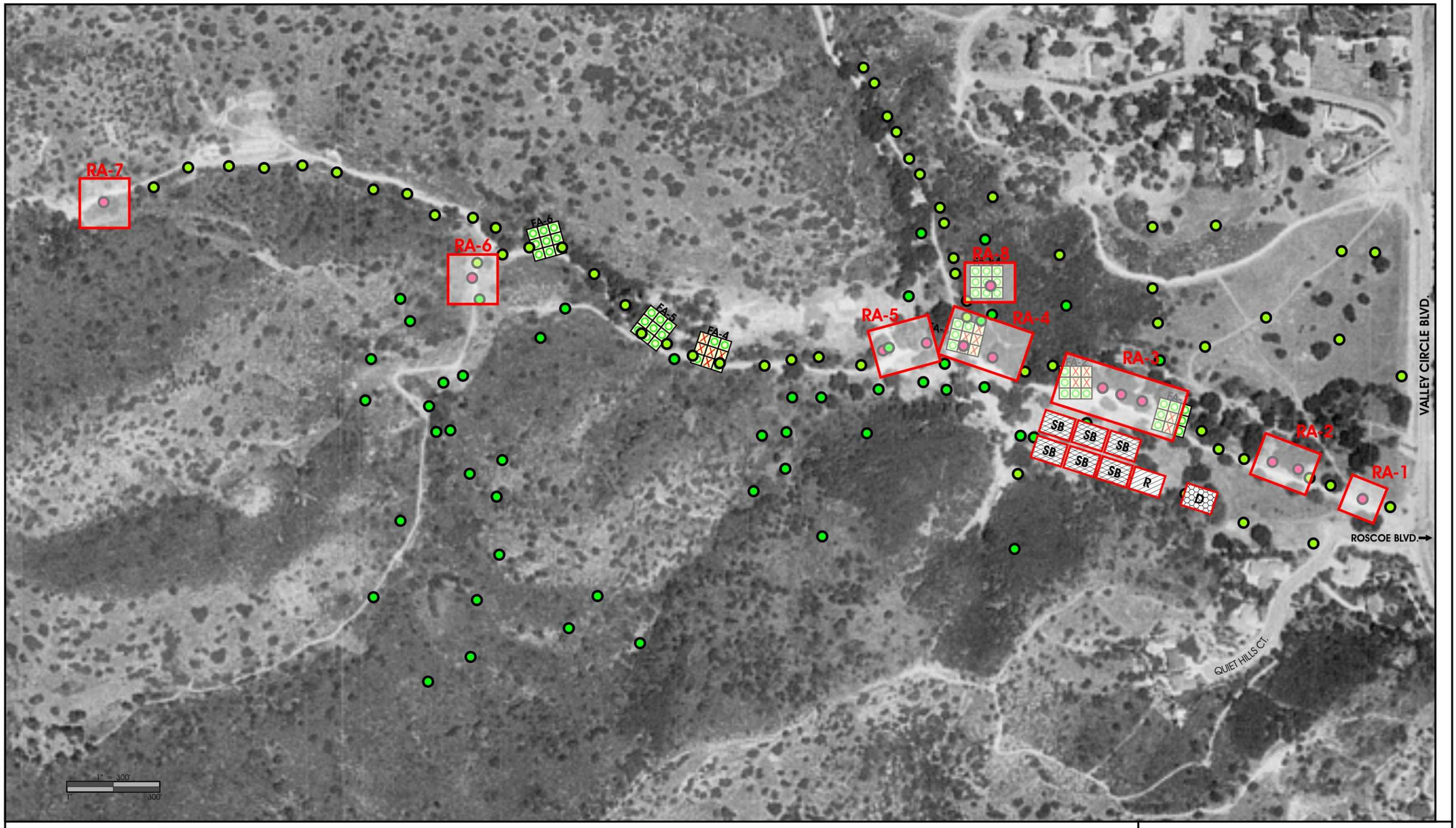
SITE MAP

STERLING HOMES

WEST HILLS, CA

ALLWEST REMEDIATION

JOB NO. 05 8520	DATE: NOV 2005	FIGURE NO. 1



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LEGEND

- PERCHLORATE NOT DETECTED
- PERCHLORATE DETECTED
- RA-5 — TIME CRITICAL REMOVAL AREA
- SB — SOIL STORAGE BIN
- D — DEBRIS STORAGE AREA
- R — ROCK DECONTAMINATION AREA

TIME CRITICAL REMOVAL AREA MAP

STERLING HOMES
WEST HILLS, CA

ALLWEST REMEDIATION

JOB NO. 05 8520	DATE: NOV 2005	FIGURE NO. 2